## C6.4 Spread footings

See the Office of Bridges and Structures web site for archived Methods Memos listed under articles in this section.

The Methods Memos for which policies have been partially revised and/or for which document references have been updated are noted as partially revised. Any obsolete Methods Memos that apply to this section are listed at the end.

- C6.4.1 General
- C6.4.1.1 Policy overview
- C6.4.1.2 Design information
- C6.4.1.3 Definitions
- C6.4.1.4 Abbreviations and notation
- C6.4.1.5 References
- **C6.4.2** Loads
- C6.4.3 Load application
- C6.4.3.1 Load modifier
- C6.4.3.2 Limit states
- C6.4.4 Footings on rock

## C6.4.4.1 Analysis and design

## Memo 6.4.4.1-2010 ~ Location of Fixity for Frame and T-Piers on Spread Footings

Column analysis and design is sensitive to slenderness, and the designer should not model a column taller than the structural configuration allows. Although it would be acceptable to model a pier column as fixed at 2 feet (600 mm) below top of footing or at mid-depth of footing, the column is restrained significantly at the top of footing, and the designer should assume fixity at that elevation to minimize slenderness. Available pier software makes it relatively easy to analyze alternate models, and for pile and footing design the designer should assume pier columns extend to bottoms of footings.

Partially revised: Methods Memo No. 211: Office Guidelines for Mass Concrete and Temperature and Shrinkage Reinforcing (See Methods Memo No. 192.)

1 September 2009

Methods Memo No. 192: LRFD Office Guidelines for Temperature and Shrinkage Reinforcing in Pier Footings
1 March 2008

Partially revised: Methods Memo No. 3: Punching Shear and Wide Beam Shear 21 March 2001 (Revised 29 January 2003, only applicable with respect to the 5-foot thickness at which heat of hydration becomes a concern)

## C6.4.4.2 Detailing

Methods Memo No. 75: End Bar Clearances for Horizontal Construction Joints 6 July 2005

- C6.4.5 Footings on soil
- C6.4.5.1 Analysis and design
- C6.4.5.2 Detailing